

# (12) United States Patent Beal

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# (54) ADAPTIVE WAVE MOTION ELECTRICAL POWER GENERATOR

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	Flaid of Search	200/53 42 43

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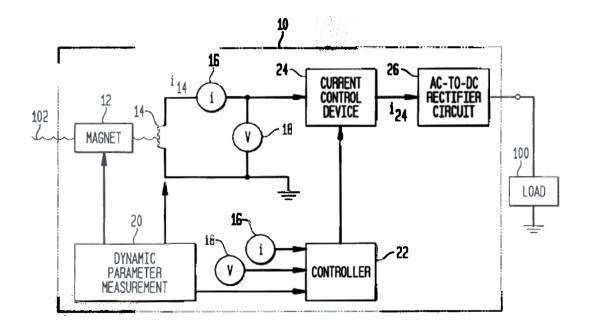
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### **ABSTRACT**

An adaptive wave motion electrical power generation method and system are provided. An alternator, floating freely at a water's surface, has magnet and wire coil structures that undergo relative movement therebetween in response to wave motion at or near the water's surface thereby causing electric current to flow through the wire coil structure. Dynamic parameters (e.g., relative acceleration, velocity or displacement) describing the relative movement between the magnet and wire coil structures are measured. Also measured are the electric current flowing through the wire coil structure and voltage thereacross. The amount of electric current flowing in the wire coil structure and delivered to the load is controlled based on the dynamic parameters.

# 25 Claims, 1 Drawing Sheet



290/54